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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,756	07/30/2003	Takayuki Hattori	2927-0152P	6804
2292	7590	12/02/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			SERGENT, RABON A	
			ART UNIT	PAPER NUMBER

1711

DATE MAILED: 12/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/629,756

Applicant(s)

HATTORI ET AL.

Examiner

Rabon Sergeant

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on July 30, 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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1. Claims 6 and 8 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Adequate support has not been provided for the amendments to claims 6 and 8. Furthermore, with respect to claim 8, applicants have failed to adequately define "main component".

2. Claim 2 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Applicants have failed to provide an adequate written description with respect to the subject matter governing JIS K6262, JIS K6911, and JIS K-6253.

3. Claim 2 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Applicants have failed to provide enablement for the features pertaining to JIS K6262, JIS K6911, and JIS K-6253, because the specifics of the standards have not been set forth. In the absence of this information, one of ordinary skill cannot duplicate or realize the claimed features with respect to compression set, volume resistivity, and hardness.

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4. With respect to the rejections set forth within paragraphs 2 and 3, the examiner has considered applicants' arguments; however, in the absence of translations of the foreign standards, the position is maintained that applicants have failed to comply with the written description and enablement requirements of 35 U.S.C. 112, first paragraph.

5. Claims 3-6, 8, and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Within claim 3, the language, "said volume resistivity", lacks antecedent basis from claim 1. Applicants have not addressed this issue.

Within claim 8, the meaning of the language, "a main component", is unclear. It cannot be determined what constitutes "a main component", and it is unclear what the language is relative to.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

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invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1-10 and 12-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vreeland et al. ('001 or '457) or Gloyer et al. ('576), each in view of Barksby et al. ('445) and Knobel et al. ('669).

The primary references disclose rollers comprising an electrically conductive polyurethane coating, wherein the polyurethane is derived from a polyol free of unsaturation and contains a conductivity or charge control agent, such as an organometallic salt. See abstract and column 7, line 49 within Vreeland et al. ('001). See abstract and column 9, line 51 within Vreeland et al. ('457). See abstract and paragraph 54 within Gloyer et al.

8. While the primary references disclose that the polyol reactant is free of unsaturation, the references fail to specifically recite applicants' claimed polyether polyol having the claimed degree of unsaturation. However, applicants' claimed low unsaturated polyether polyol was a known component for polyurethane elastomers having physical properties especially adapted for use in the manufacture of rollers. This position is supported by the teachings of Barksby et al. See abstract; column 6, lines 6-14; and column 7, lines 44+ within Barksby et al. Furthermore, applicants' claimed salts were specifically known at the time of invention to be useful for promoting electrical conductivity in polyurethanes. See abstract; column 4, line 65; column 6, lines 23+; and columns 7 and 8 within Knobel et al.

9. Therefore, since applicants' claimed low unsaturation polyether polyol was known to be useful for producing rollers having improved properties and since applicants' claimed salts were known conductivity agents for polyurethanes, the position is taken that it would have been

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obvious to incorporate these components within the electrically conductive polyurethanes of the primary references, so as to obtain a composition and roller having the improved properties disclosed by the secondary references. This position is bolstered by the fact that it has been held that it is *prima facie* obvious to utilize a known compound for its known function. *In re Linder*, 173 USPQ 356. *In re Dial et al.*, 140 USPQ 244.

10. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vreeland et al. ('001 or '457) or Gloyer et al. ('576), each in view of Barksby et al. ('445) and Knobel et al. ('669) as applied to claims 1-10 and 12-14 above, and further in view of Nogami et al. ('646) or Priebe et al. ('188).

As aforementioned, the teachings of Vreeland et al. ('001 or '457) or Gloyer et al. ('576), each in view of Barksby et al. ('445) and Knobel et al. ('669) are considered to render applicants' composition and roller *prima facie* obvious; however, these references are silent regarding applicants' plasma treatment of the metal shaft. Still, the treatment of metal with plasma to improve its adhesion to other layers, including polymers, was known at the time of invention. See column 10, lines 4-10 within Nogami et al. See abstract and column 2, lines 20+ within Priebe et al. Therefore, the position is taken that it would have been *prima facie* obvious to plasma treat the metal shaft of the roller prior to application of the elastomer, so as to improve the adhesion of the elastomer to the metal surface and the durability of the resulting roller.

11. Applicants have argued that Barksby et al. fail to disclose the maximum 0.025 meq/g requirement of claim 1 and that Knobel et al. fail to disclose the lithium salts set forth within claim 17. In response, applicants' arguments are entirely without merit. Barksby et al. disclose at column 7, line 50 that the polyether polyol has an unsaturation level as low as 0.002 meq/g.

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Knobel et al. disclose the claimed lithium salts at columns 7 and 8, specifically column 7, lines 31 and 32 and column 8, lines 31+. Additionally, the examiner has considered applicants' examples for evidence of unexpected results; however, the examples of the invention are not commensurate in scope with the claims, and the comparative examples are not representative of the closest available upon prior art (i.e.; the relied-upon prior art). Therefore, the examples are inadequate to rebut the *prima facie* case of obviousness.

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication should be directed to R. Sergent at telephone number (571) 272-1079.

R. Sergent
November 29, 2005


RABON SERGENT
PRIMARY EXAMINER